CLAIMS LISTING (Marked)

1-3: CANCELLED.

4. (NEWLY AMENDED) A system, comprising:

a nozzle having an inlet, a throat, and an exhaust;

a fluid flowing through the nozzle;

means for electrical stimulation inducing a low energy nuclear reaction (LENR) embedded within the nozzle ~~for transferring energy into and heating the nozzle~~, thereby indirectly transferring energy into and heating the fluid and inducing a phase change in the fluid; and,

means for transforming the flow from the exhaust into work outside the system.

5 (ORIGINAL). A system as in Claim 4, wherein the cross-sectional interior volume of the inlet, throat, and exhaust of the nozzle vary only across one plane perpendicular to the axis of fluid flowing through the nozzle.

6. (ORIGINAL) A system as in Claim 4, further comprising a surfactant having an extra ion dissolved in the fluid.

7. (ORIGINAL) A system as in Claim 6, wherein the surfactant is a short-chain molecule.

8. (ORIGINAL) A system as in Claim 6, wherein the surfactant is a short-chain molecule having only 5 to 50 atoms.

9. (ORIGINAL) A system as in Claim 6, wherein the surfactant is a short-chain molecule having only 5 to 10 atoms.

10. (ORIGINAL) A system as in Claim 6, wherein the fluid includes a lithium salt and the surfactant is non-reactive to the fluid and lithium salt.

24. (NEW) A system as in Claim 10, wherein the nozzle further comprises:

a third block of an insulating material separating a first structural core and a heat transference block.

25. (NEW) A system as in Claim 24, wherein the third block further comprises:

a first sub-layer of an electrical insulating material; and,

a second sub-layer of a thermal insulating material.

26. (NEW) A system as in Claim 24, wherein means embedded within the nozzle for transferring energy into and heating the nozzle, thereby indirectly transferring energy into and heating the fluid and inducing a phase change in the fluid further comprise:

a structural core formed of a first material;

a heat transference block formed of a second material, said heat transference block having at least one surface over which the fluid flows and from which heat is transferred from the heat transference block to the fluid; and,

means for inducing a low-energy nuclear reaction within the heat transference block to create heat in the heat transference block.

27. (NEW) A system as in Claim 26, wherein the fluid includes deuterium.

28. (NEW) A system as in Claim 26, wherein the second material is a metal alloy whose principal component comes from the following set of materials: palladium, lanthanum, praseodymium, cerium, titanium, zirconium, hafnium, vanadium, niobium, tantalum, nickel, thorium, protactinium, and uranium.

29. (NEW) A system as in Claim 26, wherein the second material is palladium.

30. (NEW) A system as in Claim 26, wherein the means for inducing a low-energy nuclear reaction within the heat transference block to create heat in the heat transference block further comprise:

an anode; and,

means for electrically stimulating the heat transference block by passing a current between the anode and the heat transference block.

31. (NEW) A system as in Claim 30 wherein the electrical stimulation of the heat transference block varies periodically.

32. (NEW) A system as in Claim 30, wherein the stimulation of the heat transference block occurs in a periodic pattern of increasing impulses.

33. (NEW) A system as in Claim 26, wherein the means for inducing a low-energy nuclear reaction in the heat transference block further comprise at least one laser in the nozzle whose emission is directed against the heat transference block.

34. (NEW) A system as in Claim 33, wherein the laser is capable of variable emission.

35. (NEW) A system as in Claim 26, wherein the means for inducing a low-energy nuclear reaction within the heat transference block to create heat in the heat transference block further comprise:

an anode;

a cathode;

means for electrically stimulating the heat transference block between the anode and cathode; and,

at least one laser whose emission affects the heat transference block.

36. (NEW) A system as in Claim 34, wherein both the laser, and the means for electrically stimulating between the anode and cathode the heat transference block, are capable of variable output.